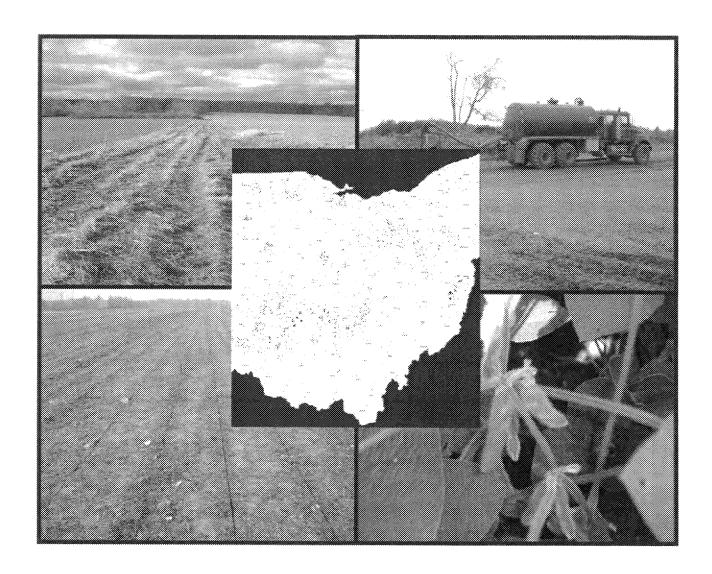


John R. Kasich, Governor Mary Taylor, Lt. Governor Craig W. Butler, Director

**Division of Surface Water** 

# Application for Authorization: Class B Biosolids Beneficial Use Sites



#### Biosolids Treatment Works Information

| Treatment works name: Dovetail Energy, LLC   |  |  |   |  |  |
|--|--|--|---|--|--|
| Ohio NPDES permit #: 1IN00305 County: Greene |  |  | *************************************** |  |  |
| Mailing address: 1146 Herr Rd                |  |  |   |  |  |
| City: Fairborn State: OH Zip: 45324          |  |  | »······                                 |  |  |
| Operator of record: Taylor Faecher           |  |  |   |  |  |
| Telephone number: (419) 253-5300             |  |  |   |  |  |
| Email address: info@renergy.com              |  |  |   |  |  |

#### **Certification Statement**

- 1. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.
- 2. I have read and understand Chapter 3745-40 of the Ohio Administrative Code (OAC) and I agree to beneficially use biosolids in accordance with all applicable beneficial use requirements and restrictions established in Chapter 3745-40 of the Ohio Administrative Code.
- I agree to only beneficially use biosolids that have satisfied a pathogen reduction alternative and a vector attraction reduction option and have metals concentration below the pollutant ceiling concentrations as established in Chapter 3745-40 of the Ohio Administrative Code.
- I agree to maintain all applicable records established in Chapter 3745-40 of the Ohio Administrative Code.

Signature E1717 Date

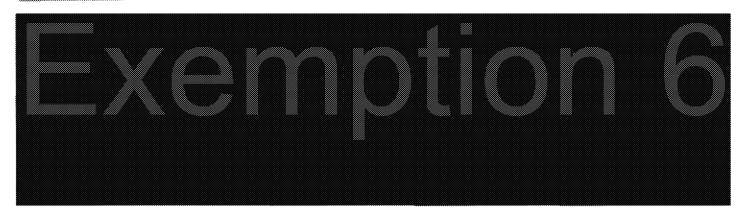
This form shall be signed by the <u>operator of record</u> for the treatment works, be an original signature, not a copy, and must be less than one year old at the time the application for transfer is submitted to Ohio EPA for review.

Ohio EPA Application for Authorization (8/15)

Form BUA-1 Page 1 of 6

#### Form BUA-2

#### Owner Consent for Beneficial Use



#### Certification Statement

- I agree to allow biosolids generated by the treatment plant identified on Form BUA-1 to be beneficially used on my property at agronomic rates.
- 2. I agree to allow federal, state and local regulatory staff access to the beneficial use site for the purposes of inspecting and authorizing the beneficial use site, beneficially using biosolids, and collecting and analyzing samples from the beneficial use site. I reserve the right to ask the above parties for proper identification at any time.
- 3. I certify that I am holder of legal title to the property described on application form BUA-4, or am authorized by the holder to give consent for the land application of biosolids, and that there are no restrictions to the granting of consent under this form.

In the event the owner of the beneficial use site changes, Form BUA-2 must be revised and resubmitted to Ohio EPA.

#### Beneficial Use Site Operator Consent for Beneficial Use

| Beneficial use site operator:                         | Pitstuk Pork Far | ms Irv     |  |  |
|---|------------------|------------|--|--|
| Mailing address: 7746                                 | Her Rol          |            |  |  |
| City: Fairbon   | State: Olivo     | Zip: 45324 |  |  |
| Telephone number:                                     |                  |            |  |  |
| Email address (if available): TV Pulstuk O gwail. Com |                  |            |  |  |

#### Certification Statement

I agree to be responsible for complying with all applicable beneficial use requirements established in Chapter 3745-40 of the Ohio Administrative Code.

Ton Putating 2/1/6
Signature Date

For purposes of this form, "beneficial use site operator" means the person who plants, grows, harvests or otherwise manages feed crops, fiber crops, food crops or pasture land on the proposed beneficial use site. In the event the operator of the beneficial use site changes, Form BUA-3 must be revised and resubmitted to Ohio EPA.

Ohio EPA Application for Authorization (01/15)

Form BUA-3 Page 3 of 6

#### **Beneficial User Information**

| Beneficial user <sup>1</sup> : Dovetail Energy, | LLC       |            |
|---|-----------|------------|
| Contact person: Taylor Faecher                  |           |            |
| Mailing address: 461 State Route                | 61        |            |
| City: Marengo                                   | State: OH | Zip: 43334 |
| Telephone number: (419) 253-53                  | 00        |            |
| Email address: info@renergy.com                 | 1         |            |

#### **Certification Statement**

I agree to be responsible for complying with all applicable beneficial use requirements established in Chapter 3745-40 of the Ohio Administrative Code.

Signature<sup>2</sup>

8, <u>/7</u>, <u>/2</u> Date

Original signatures, not copies, must be less than one year old at the time the application for transfer is submitted to Ohio EPA for review.

<sup>&</sup>lt;sup>1</sup> For purposes of this form, the beneficial user means the person who sprays or spreads Class B biosolids onto the surface of the beneficial use site, injects below the surface of the beneficial use site, or incorporates into the soil of the beneficial use site, for the purpose of providing an agronomic benefit.

<sup>&</sup>lt;sup>2</sup> In the event the beneficial user of the beneficial use site changes, Form BUA-4 must be revised and resubmitted to Ohio EPA.

#### **Beneficial Use Site Information**

| Ø  |
|----|
| ×  |
|    |
| š  |
| X  |
|    |
| ű  |
| ×  |
| ×  |
|    |
|    |
| ×  |
| ×  |
| ×. |
|    |
|    |
|    |
| Š  |
| å  |
|    |
| Š  |
|    |
|    |
|    |
|    |
| ×  |
|    |
| ×. |
|    |
| ×  |
|    |
|    |
| ×  |
| Š  |
| ā  |
| k  |
| ä  |
|    |
| 8  |
| Ö  |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |
|    |

| Field site I.D.: GRS-07-03                               |   |   |              |                       |
|--|---|---|--------------|-----------------------|
| Beneficial use site location:                            | South of                                | Rona Vi                                 | llage off    | Armstrong Rd          |
| County: Greene   |   | Township                                | Bath         |                       |
| Latitude: 39.83043                                       |   | Longitude                               | : -83.97644  |                       |
| Total acreage proposed for bene                          | eficial use: 24                         | 1                                       |              |                       |
| Type of beneficial use to be perf                        | formed:                                 | Ground sl                               | ope percent: |                       |
| Surface application   Less th                            |   | an 15%    <br>han 20%   _               | 15% to 19.9% |                       |
| Soil pH (s.u): 7.8                                       |   | Soil phos                               | ohorus (mg/k | <b>g)</b> : <u>39</u> |
| Bedrock depth (feet): 2.49 ft  Bray Kurtz P1  Mehlich 3  |   |   |              |                       |
| Type of crops to be grown:                               | Crop                                    | Туре                                    | Expecte      | ed Yield              |
|  | Corn                                    | ······································  | 1 7 5        |                       |
|  | Soybeans                                |   | 5 5          |                       |
|  | Wheat                                   | *************************************** | 7 0          |                       |
|  | Pasture                                 |   |              |                       |
|  | Hay                                     | *************************************** |              |                       |
|  | Other:                                  |   |              |                       |
| Soil Types:  |   |   |              |                       |
| Soil Unit Soil II  | nit Name                                |   | Hydrologic   | Flooding Frequency    |
| Symbol   |   |   | Soil Group   | Class                 |
|  | Eldean silt loam, 2 to 6 percent slopes |   | <u>B</u>     | None                  |
|  |   |   | <u>C</u>     | None                  |
| R h B Ritchey silt loam, 2<br>R h C Ritchey silt loam, 6 | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  | D            | None<br>None          |
| K ii C Kitchey sitt loam, o                              | io iz paica                             | iir siohes                              | <u>U</u>     | NUIIE                 |
|  |   |   |              |                       |
| <u> </u>   |   |   |              |                       |

Ohio EPA Application for Authorization (8/15)

Form BUA-5 Page 5 of 6

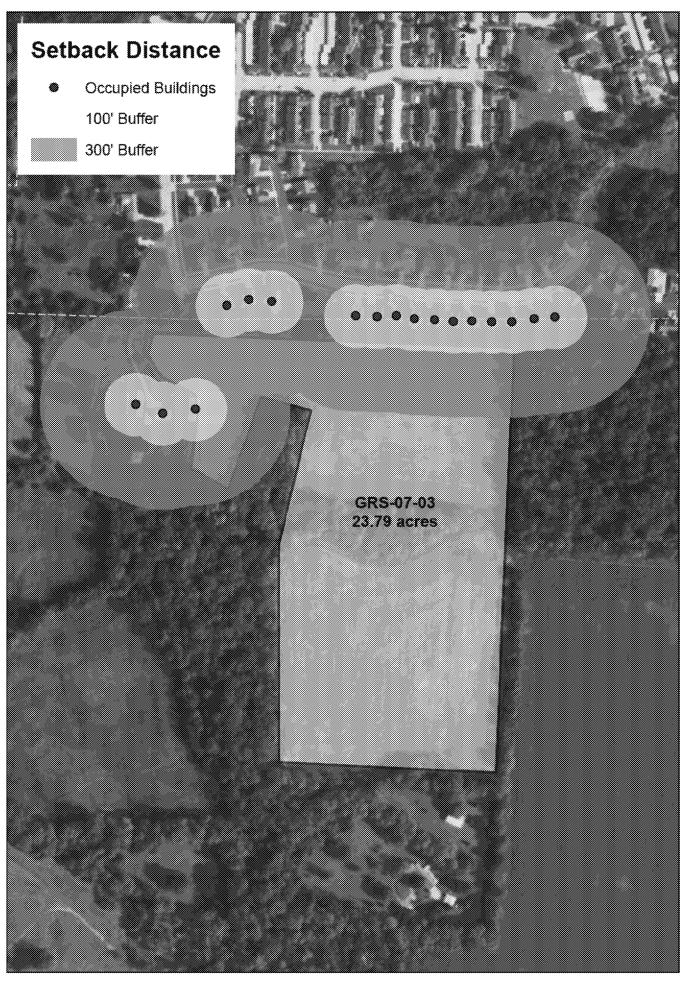
| Applicable isolation distances:  |  |  |  |  |  |
|--|--|--|--|--|--|
| Type of Isolation Distance   |  |  |  |  |  |
| Surface waters of the state Sinkhole/UIC class V drainage  |  |  |  |  |  |
| Occupied building Private potable water source   |  |  |  |  |  |
| Medical care facility  |  |  |  |  |  |
|  |  |  |  |  |  |
| Are any endangered species or endangered species habitats located on the site?   | beneficial use                         |  |  |  |  |
| ☐ Yes No   |  |  |  |  |  |
| If "Yes" is marked, list the types of endangered species or endangered species ha  | abitat:                                |  |  |  |  |
|  |  |  |  |  |  |
|  | ······································ |  |  |  |  |
| Have biosolids been beneficially used on the site since July 20, 1993?   |  |  |  |  |  |
| ☐ Yes ■ No   |  |  |  |  |  |
| If "Yes" is marked, list the biosolids generators and years beneficial use occurred  | <b>i</b> :                             |  |  |  |  |
| I I Langrothr Rulli-Vingthit for I   | ear of<br>ficial Use                   |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | J                                      |  |  |  |  |
| The application must also include all of the following:  |  |  |  |  |  |
| □ A soil map of the proposed beneficial use site; □ A frequency flood class map of the proposed beneficial use site; □ An aerial map of the proposed beneficial use site that clearly identifies the entrance of the beneficial use site from the nearest road and all applicable isolation distances as established in Chapter 3745-40 of the Ohio Administrative Code; □ A vicinity road map at or near the township level that clearly identifies the proposed. |  |  |  |  |  |
| <ul> <li>A vicinity road map at or near the township level that clearly identifies the proposed beneficial use site with all roads labeled; and</li> <li>A copy of the most recent soil test results identified in this form.</li> </ul>   |  |  |  |  |  |

Ohio EPA Application for Authorization (8/15)

Form BUA -5 Page 6 of 6



### GRS-07-03 Setback Distance





0 0.04 0.08 0.16 Miles

| Setback Dist  | ance                        |            |
|---------------|-----------------------------|------------|
| GRS-07-03     |                             |            |
| Total Area: 2 | 23.79 acres                 |            |
| Setbacks:     |                             |            |
|               | Residence - 300' Buffer     | 6.22 acres |
|               | Residence - 100' Buffer     | .65 acres  |
|               | Surface Waters - 33' Buffer | 0 acres    |
|               | Total Setback Area:         | 6.87 acres |
|               |                             |            |



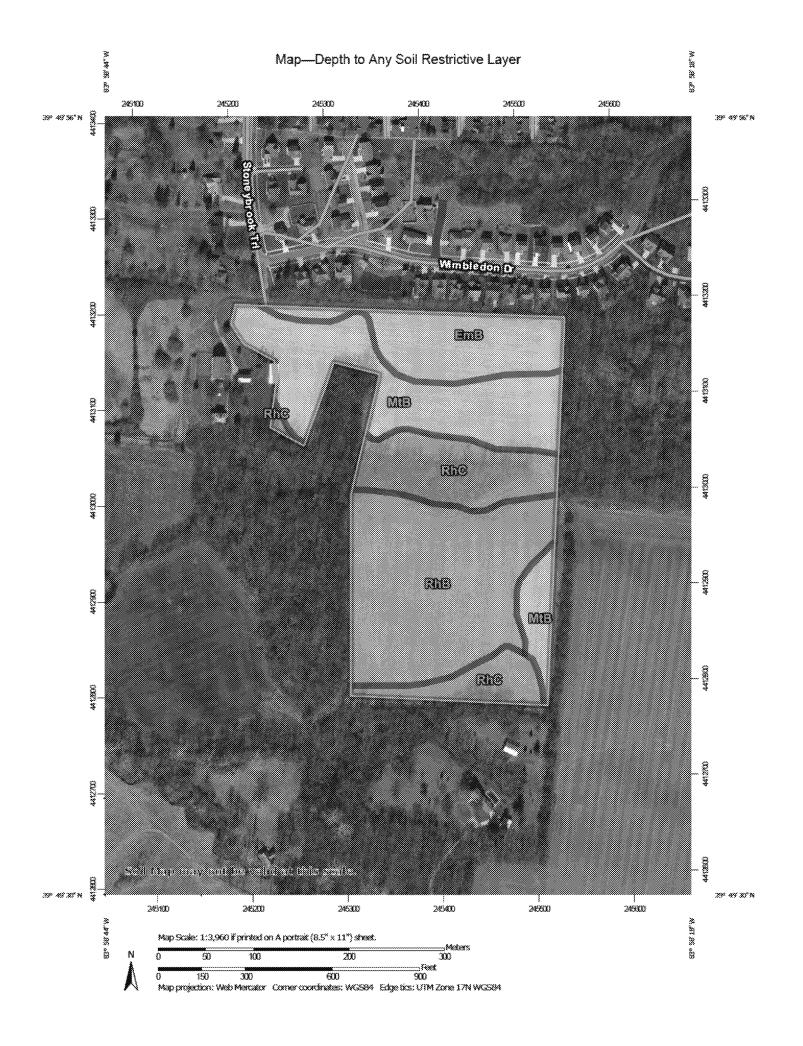
### **Map Unit Legend**

| Greene County, Ohio (OH057) |   |              |                |  |
|-----------------------------|---|--------------|----------------|--|
| Map Unit Symbol             | Map Unit Name                             | Acres in AOI | Percent of AOI |  |
| EmB                         | Eldean silt loam, 2 to 6 percent slopes   | 3.5          | 14.8%          |  |
| MtB                         | Milton silt loam, 2 to 6 percent slopes   | 6.9          | 29.0%          |  |
| RhB                         | Ritchey silt loam, 2 to 6 percent slopes  | 8.6          | 36.2%          |  |
| RhC                         | Ritchey silt loam, 6 to 12 percent slopes | 4.8          | 20.0%          |  |
| Totals for Area of Interest | 1   | 23.8         | 100.0%         |  |



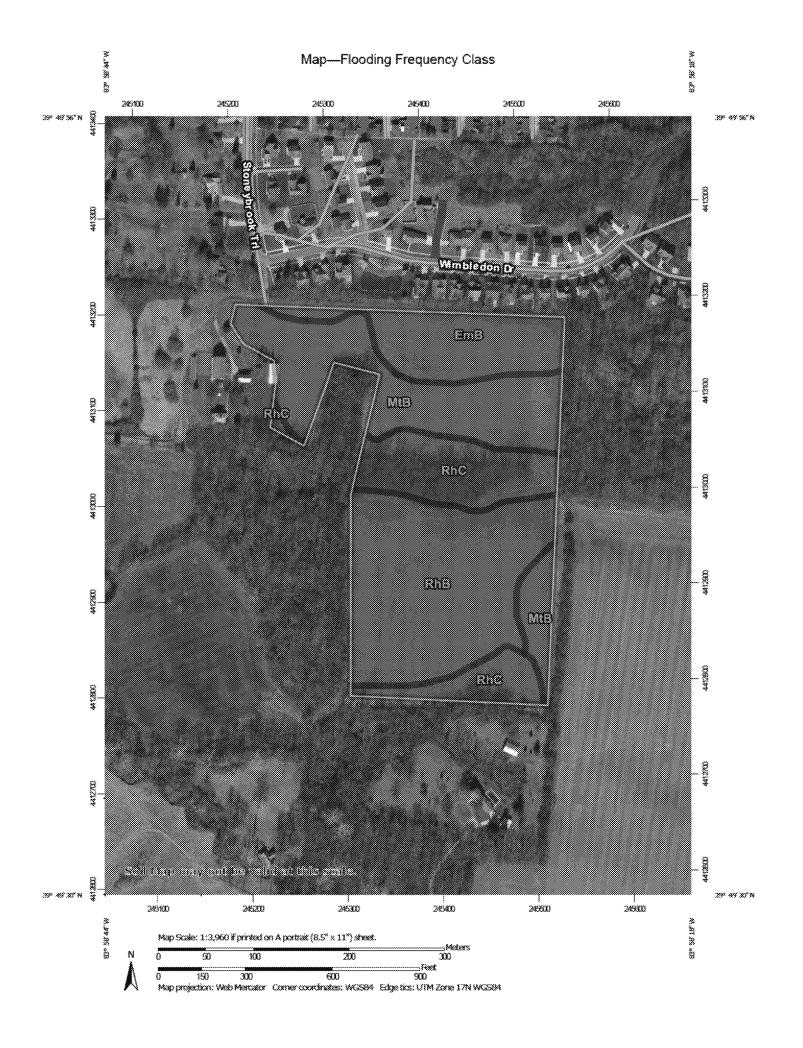
### Table—Hydrologic Soil Group

| Hydrologic Soil Group— Summary by Map Unit — Greene County, Ohio (OH057) |   |        |              |                |
|--|---|--------|--------------|----------------|
| Map unit symbol  | Map unit name                             | Rating | Acres in AOI | Percent of AOI |
| EmB  | Eldean silt loam, 2 to 6 percent slopes   | В      | 3.5          | 14.8%          |
| MtB  | Milton silt loam, 2 to 6 percent slopes   | С      | 6.9          | 29.0%          |
| RhB  | Ritchey silt loam, 2 to 6 percent slopes  | D      | 8.6          | 36.2%          |
| RhC  | Ritchey silt loam, 6 to 12 percent slopes | D      | 4.8          | 20.0%          |
| Totals for Area of Inter   | est                                       | i      | 23.8         | 100.0%         |



#### Table—Depth to Any Soil Restrictive Layer

| Depth to Any Soil Restrictive Layer— Summary by Map Unit — Greene County, Ohio (OH057) |   |                      |              |                |
|--|---|----------------------|--------------|----------------|
| Map unit symbol  | Map unit name                             | Rating (centimeters) | Acres in AOI | Percent of AOI |
| EmB  | Eldean silt loam, 2 to 6 percent slopes   | 76                   | 3.5          | 14.8%          |
| MtB  | Milton silt loam, 2 to 6 percent slopes   | 76                   | 6.9          | 29.0%          |
| RhB  | Ritchey silt loam, 2 to 6 percent slopes  | 46                   | 8.6          | 36.2%          |
| RhC  | Ritchey silt loam, 6 to 12 percent slopes | 46                   | 4.8          | 20.0%          |
| Totals for Area of Inter-  | est                                       |                      | 23.8         | 100.0%         |



### Table—Flooding Frequency Class

| Flooding Frequency Class— Summary by Map Unit — Greene County, Ohio (OH057) |   |        |              |                |
|---|---|--------|--------------|----------------|
| Map unit symbol   | Map unit name                             | Rating | Acres in AOI | Percent of AOI |
| EmB   | Eldean silt loam, 2 to 6 percent slopes   | None   | 3.5          | 14.8%          |
| MtB   | Milton silt loam, 2 to 6 percent slopes   | None   | 6.9          | 29.0%          |
| RhB   | Ritchey silt loam, 2 to 6 percent slopes  | None   | 8.6          | 36.2%          |
| RhC   | Ritchey silt loam, 6 to 12 percent slopes | None   | 4.8          | 20.0%          |
| Totals for Area of Inter-   | est                                       | 1      | 23.8         | 100.0%         |

## BROOKSIDE LABORATORIES, INC.74155-17 SOIL AUDIT AND INVENTORY REPORT

| Name Dovetail Bio Energy                               | City Fairborn                             | State <u>OH</u> |
|--|---|-----------------|
| Independent Consultant Brookside                       | Consultants of Ohio, Inc.                 | Date09/21/2017  |
| ·  |   |                 |
| Sample Location PITSTICK-DORLEY                        | _   |                 |
| Sample Identification                                  |   |                 |
| Lab Number   | 0178-1                                    |                 |
| Total Exchange Capacity (ME/100 g)                     | 13.98                                     |                 |
| pH (H <sub>2</sub> O 1:1)                              | 7.8                                       |                 |
| Organic Matter (360°C LOI) %                           | 2.27                                      |                 |
| Estimated Nitrogen Release lb/A                        | 65  |                 |
| SOLUBLE SULFUR* ppm                                    | 10  |                 |
| y MEHLICH III ib/A P as PO <sub>5</sub> ppm of P       | 179<br>39                                 |                 |
| PRAY II Ib/A Pas PO,                                   | 279                                       |                 |
| Q  | 61  |                 |
| a ppm of P   |   |                 |
| CALCIUM* Ib/A  | 3878                                      |                 |
| DALCTOM  | 1939<br>806                               |                 |
| m ppm  | 403                                       |                 |
| MAGNESIUM* <u>ib/A</u> ppm  POTASSIUM* <u>ib/A</u> ppm | 132 — — — — — — — — — — — — — — — — — — — | <del></del>     |
| SODIUM* Ib/A   | 40  |                 |
| ∑ ppm  | 20  |                 |
|  | BASE SATURATION PERCENT                   |                 |
| Calcium %  | 69.35                                     |                 |
| Magnesium % Potassium %                                | 24.02                                     | ***             |
| Sodium %   | 2.42                                      | *               |
| Other Bases %  | 0.62<br>3.60                              |                 |
| Hydrogen %   | 0.00                                      |                 |
|  | EXTRACTABLE MINORS                        |                 |
| Boron* (ppm)   | 0.79                                      |                 |
| Iron* (ppm)  | 167                                       |                 |
| Manganese* (ppm)                                       | 197                                       |                 |
| Copper* (ppm)  | 2.55                                      |                 |
| Zinc* (ppm)  | 5.76                                      |                 |
| Aluminum* (ppm)  | 523                                       |                 |
| Soluble Salts (mmhos/cm)<br>新足 Chlorides (ppm)         |   | <b>-</b>        |
| 新文 Chlorides (ppm)                                     |   |                 |
|  |   | w « » s · · ·   |

a - alkaline soil